

## CLAIMS

1        1. A method for resolving demand and supply imbalances  
2        comprising:

3                identifying at least one excess component inventory  
4        liability or at least one constraint in supply capability  
5        for an end product by matching current buying patterns for  
6        said end product against inventory liability and supply  
7        capability based on a previous demand forecast;

8                where excess component inventory liability exists:

9                        refocusing said at least one excess component  
10       inventory liability by determining alternative end products  
11       that use components identified in said at least one excess  
12       component inventory liability; and

13                executing sales activities operable for enticing  
14       sales of said alternative end products; and

15                where constrained supply capability exists:

16                        determining alternative end products that are  
17       functionally equivalent to those identified in said at  
18       least one constrained supply capability; and

19                executing sales activities operable for enticing  
20       sales of functionally equivalent alternative end products;

21                        wherein said sales activities result in  
22       reducing said at least one excess component inventory  
23       liability or avoiding said at least one constraint in  
24       supply capability.

1        2. The method of claim 1, wherein said identifying at  
2        least one excess component inventory liability or at least  
3        one constraint in supply capability includes:  
4                exploding a bill of materials for a product structure  
5        based upon a sales forecast, demand data, and supplier  
6        commitment data;  
7                imploding results of said exploding into end products  
8        and an available to promise statement;  
9                translating said results into lead times for delivery;  
10       and  
11               identifying remaining results not included in said  
12       available to promise statement as excess component  
13       inventory liability or constraint in supply capability for  
14       an end product.

1        3. The method of claim 1, wherein said refocusing said at  
2        least one excess component inventory liability by  
3        determining alternative end products that use components  
4        identified in said at least one excess component inventory  
5        liability includes performing a supply liability reduction  
6        process comprising:  
7                a procurement and development assessment sub-process  
8        including mitigation activities, said procurement and  
9        development assessment sub-process mitigation activities  
10       representing a greatest magnitude of liability;  
11               wherein said procurement and development sub-  
12       process mitigation activities are performed first in time  
13       before other sub-processes.

1 4. The method of claim 3, wherein said performing a supply  
2 liability reduction process further includes:

3 a liability council assessment sub-process including  
4 mitigation activities, said liability council assessment  
5 sub-process mitigation activities representing a magnitude  
6 of liability less than that of said procurement and  
7 development assessment sub-process;

8 wherein said liability council assessment sub-  
9 process mitigation activities are performed second in time  
10 after said procurement and development assessment sub-  
11 process.

1 5. The method of claim 3, wherein said performing a supply  
2 liability reduction process further includes:

3 a sales activities sub-process including mitigation  
4 activities, said sales activities sub-process mitigation  
5 activities representing a magnitude of liability less than  
6 that of said liability council assessment sub-process;

7 wherein said sales activities sub-process  
8 mitigation activities are performed third in time after  
9 said liability council assessment sub-process.

1       6. The method of claim 3, wherein said performing a supply  
2       liability reduction process further includes:

3             a liability write off sub-process including mitigation  
4       activities, said liability write off sub-process mitigation  
5       activities representing a magnitude of liability less than  
6       that of said sales activities;

7             wherein said liability write off sub-process  
8       mitigation activities are performed fourth in time after  
9       said sales activities sub-process.

1       7. The method of claim 3, wherein said procurement and  
2       development assessment sub-process mitigation activities  
3       comprise at least one of:

4             rebalancing demand and supply by shifting demand or  
5       supply from one geography to another;

6             selling components back to vendors;

7             negotiating with vendors to eliminate or reduce  
8       liability based upon mutually agreed to incentives that  
9       provide incremental value to both parties;

10            using excess components as field parts in support of a  
11       warranty program or servicing requirements;

12            qualifying excess components in new products; and

13            adjusting said sales forecast to account for excess or  
14       constrained components.

1        8. The method of claim 4, wherein said liability council  
2        assessment mitigation activities comprise at least one of:  
3            updating said sales forecast to account for excess or  
4        constrained components;  
5            conducting squared sets analysis;  
6            brokering components or products that are no longer  
7        saleable;  
8            creating saleable bundles with other current  
9        offerings;  
10          developing option packages;  
11          determining alternative routes to market; and  
12          making liability write-off determinations.

1        9. The method of claim 5, wherein said sales activities  
2        sub-process mitigation activities sub-process comprise at  
3        least one of:  
4            developing a promotion for long-term over supply  
5        through advertisements and communications media;  
6            offering a solution via alternate routes to market;  
7            authorizing pricing actions comprising at least one  
8        of:  
9            price decreases;  
10          discount incentives; and  
11          pricing delegations;  
12          establishing incentives for buying or selling;  
13          reassessing commission structures for an offering; and  
14          updating telesales team scripts for inbound and  
15        outbound telephone calls.

1        10. The method of claim 6, wherein said liability write  
2        off mitigation activities comprise at least one of:  
3                negotiating with a vendor; and  
4                scrapping components associated with said liability.

1        11. The method of claim 1, wherein said sales activities  
2        include:  
3                cross-sell;  
4                up-sell;  
5                alternative-sell; and  
6                down-sell.

1 12. A demand conditioning process system for resolving  
2 demand and supply imbalances comprising:

3 a supply liability reduction process executable upon  
4 identifying at least one excess component inventory  
5 liability, said supply liability reduction process  
6 comprising:

7 a procurement and development assessment sub-  
8 process and associated mitigation activities, said  
9 procurement and development assessment sub-process  
10 representing a greatest magnitude of liability;

11 a liability council assessment sub-process and  
12 associated mitigation activities, said liability council  
13 assessment sub-process representing a magnitude of  
14 liability less than that of said procurement and  
15 development assessment sub-process;

16 a sales activities sub-process and associated  
17 mitigation activities, said sales activities sub-process  
18 representing a magnitude of liability less than that of  
19 said liability council assessment sub-process; and

20 a liability write-off sub-process and associated  
21 mitigation activities, said liability write-off sub-process  
22 representing a magnitude of liability less than that of  
23 said sales activities sub-process;

24 wherein said supply liability reduction  
25 process performs at least one sub-process in an order of  
26 said magnitude of liability, said at least one sub-process  
27 reducing said at least one excess component inventory  
28 liability by:

29                                   determining alternative end products  
30   that use components identified in said at least one excess  
31   component inventory liability; and  
32                                   executing sales activities operable for  
33   enticing sales of said alternative end products.



1 13. A storage medium comprising machine-readable computer  
2 program code for resolving demand and supply imbalances,  
3 the storage medium including instructions for causing a  
4 computer to implement a method, comprising:

5 identifying at least one excess component inventory  
6 liability or at least one constraint in supply capability  
7 for an end product by matching current buying patterns for  
8 said end product against inventory liability and supply  
9 capability based on a previous demand forecast;

10 where excess component inventory liability exists:

11 refocusing said at least one excess component  
12 inventory liability by determining alternative end products  
13 that use components identified in said at least one excess  
14 component inventory liability; and

15 executing sales activities operable for enticing  
16 sales of said alternative end products; and

17 where constrained supply capability exists:

18 determining alternative end products that are  
19 functionally equivalent to those identified in said at  
20 least one constrained supply capability; and

21 executing sales activities operable for enticing  
22 sales of functionally equivalent alternative end products;

23 wherein said sales activities result in  
24 reducing said at least one excess component inventory  
25 liability or avoiding said at least one constraint in  
26 supply capability.

1 14. The storage medium of claim 13, wherein said  
2 identifying at least one excess component inventory  
3 liability or at least one constraint in supply capability  
4 includes:

5 exploding a bill of materials for a product structure  
6 based upon a sales forecast, demand data, and supplier  
7 commitment data;

8 imploding results of said exploding into end products  
9 and an available to promise statement;

10 translating said results into lead times for delivery;  
11 and

12 identifying remaining results not included in said  
13 available to promise statement as excess component  
14 inventory liability or constraint in supply capability for  
15 an end product.

1 15. The storage medium of claim 13, wherein said  
2 refocusing said at least one excess component inventory  
3 liability by determining alternative end products that use  
4 components identified in said at least one excess component  
5 inventory liability includes performing a supply liability  
6 reduction process comprising:

7 a procurement and development assessment sub-process  
8 including mitigation activities, said procurement and  
9 development assessment sub-process mitigation activities  
10 representing a greatest magnitude of liability;

11 wherein said procurement and development sub-  
12 process mitigation activities are performed first in time  
13 before other sub-processes.

1 16. The storage medium of claim 15, wherein said  
2 performing a supply liability reduction process further  
3 includes:

4 a liability council assessment sub-process including  
5 mitigation activities, said liability council assessment  
6 sub-process mitigation activities representing a magnitude  
7 of liability less than that of said procurement and  
8 development assessment sub-process;

9 wherein said liability council assessment sub-  
10 process mitigation activities are performed second in time  
11 after said procurement and development assessment sub-  
12 process.

1 17. The storage medium of claim 15, wherein said  
2 performing a supply liability reduction process further  
3 includes:

4 a sales activities sub-process including mitigation  
5 activities, said sales activities sub-process mitigation  
6 activities representing a magnitude of liability less than  
7 that of said liability council assessment sub-process;

8 wherein said sales activities sub-process  
9 mitigation activities are performed third in time after  
10 said liability council assessment sub-process.

1 18. The storage medium of claim 15, wherein said  
2 performing a supply liability reduction process further  
3 includes:

4 a liability write off sub-process including mitigation  
5 activities, said liability write off sub-process mitigation  
6 activities representing a magnitude of liability less than  
7 that of said sales activities;

8 wherein said liability write off sub-process  
9 mitigation activities are performed fourth in time after  
10 said sales activities sub-process.

1 19. The storage medium of claim 15, wherein said  
2 procurement and development assessment sub-process  
3 mitigation activities comprise at least one of:

4 rebalancing demand and supply by shifting demand or  
5 supply from one geography to another;

6 selling components back to vendors;

7 negotiating with vendors to eliminate or reduce  
8 liability based upon mutually agreed to incentives that  
9 provide incremental value to both parties;

10 using excess components as field parts in support of a  
11 warranty program or servicing requirements;

12 qualifying excess components in new products; and

13 adjusting said sales forecast to account for excess or  
14 constrained components.

1       20. The storage medium of claim 16, wherein said liability  
2 council assessment mitigation activities comprise at least  
3 one of:

4           updating said sales forecast to account for excess or  
5 constrained components;

6           conducting squared sets analysis;

7           brokering components or products that are no longer  
8 saleable;

9           creating saleable bundles with other current  
10 offerings;

11          developing option packages;

12          determining alternative routes to market; and

13          making liability write-off determinations.

1       21. The storage medium of claim 17, wherein said sales  
2 activities sub-process mitigation activities sub-process  
3 comprise at least one of:

4           developing a promotion for long-term over supply  
5 through advertisements and communications media;

6           offering a solution via alternate routes to market;

7           authorizing pricing actions comprising at least one  
8 of:

9               price decreases;

10              discount incentives; and

11              pricing delegations;

12          establishing incentives for buying or selling;

13          reassessing commission structures for an offering; and

14          updating telesales team scripts for inbound and  
15 outbound telephone calls.

1       22. The storage medium of claim 18, wherein said liability  
2 write off mitigation activities comprise at least one of:  
3       negotiating with a vendor; and  
4       scrapping components associated with said liability.

1       23. The storage medium of claim 15, wherein said sales  
2 activities include:  
3       cross-sell;  
4       up-sell;  
5       alternative-sell; and  
6       down-sell.